WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL ATTENTION

JOHN DEERE 135P 1FF135PAHNF000131

Component Diesel Engine

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (-	<u>971</u> 7						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Number		Client Info		JR0202687		
	Sample Date		Client Info		06 Feb 2024		
	Machine Age	hrs	Client Info		463		
	Oil Age	hrs	Client Info		463		
	Filter Age	hrs	Client Info		463		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ATTENTION		
WEAR	Iron	nnm	ASTM D5185m	. 100	6		
VEAN	Iron	ppm			6		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m	>4	0		
	Titanium	ppm	ASTM D5185m	0	0		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m		4		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		17		
	Tin	ppm	ASTM D5185m	>15	<1		
	Vanadium	ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	15		
	Potassium	ppm	ASTM D5185m	>20	4		
Fuel content negligible. There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524	>5	1.3		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	6.7		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	16.2		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
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FLUID CONDITION	Sodium	ppm	ASTM D5185m		1		
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Boron	ppm	ASTM D5185m		148		
	Barium	ppm	ASTM D5185m		2		
	Molybdenum	ppm	ASTM D5185m		15		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		186		
	Calcium	ppm	ASTM D5185m		1990		
	Phosphorus	ppm	ASTM D5185m		1057		
	Zinc	ppm	ASTM D5185m		1253		
	Sulfur	ppm	ASTM D5185m		2769		
	Oxidation	Abs/.1mm	*ASTM D7414		10.4		
	Base Number (BN)		ASTM D2896		8.1		
	Visc @ 100°C	cSt	ASTM D445	15.4	12.1		







Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Lab Number : 06083423 Unique Number: 10870868

: JR0202687

Received **Tested** Diagnosed

: 08 Feb 2024 : 13 Feb 2024

: 13 Feb 2024 - Don Baldridge Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

JRE - GARNER 4161 AUBURN CHURCH RD GARNER, NC

US 27529 Contact: RALEIGH SHOP

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Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)